


```
RRRRRRRR  MM  MM  333333  PPPPPPPP  RRRRRRRR  000000  88888888  EEEEEEEEE
R7RRRRRR  MM  MM  333333  PPPPPPPP  RRRRRRRR  000000  88888888  EEEEEEEEE
RR      RR  MMM  MMM  33      33  PP      PP  RR      RR  00      00  88      88  EE
RR      RR  MMM  MMM  33      33  PP      PP  RR      RR  00      00  88      88  EE
RR      RR  MM   MM   33      33  PP      PP  RR      RR  00      00  88      88  EE
RR      RR  MM   MM   33      33  PPPPPPPP  RRRRRRRR  00      00  88888888  EEEEEEEE
RRRRRRRR  MM   MM   MM   33      33  PPPPPPPP  RRRRRRRR  00      00  88888888  EEEEEEEE
RR      RR  MM   MM   MM   33      33  PP      PP  RR      RR  00      00  88      88  EE
RR      RR  MM   MM   MM   33      33  PP      PP  RR      RR  00      00  88      88  EE
RR      RR  MM   MM   MM   33      33  PP      PP  RR      RR  00      00  88      88  EE
RR      RR  MM   MM   MM   33      33  PP      PP  RR      RR  00      00  88      88  EE
RR      RR  MM   MM   MM   333333  PP      PP  RR      RR  000000  88888888  EEEEEEEEE
RR      RR  MM   MM   MM   333333  PP      PP  RR      RR  000000  88888888  EEEEEEEEE

LL          IIIIII  SSSSSSSS
LL          IIIIII  SSSSSSSS
LL          II      SS
LL          II      SS
LL          II      SS
LL          II      SS
LL          II      SSSSSS
LL          II      SSSSSS
LL          II      SS
LL          II      SS
LL          II      SS
LL          II      SS
LLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLL  IIIIII  SSSSSSSS
```

.....

```
0001 0 MODULE RM3PROBE (LANGUAGE (BLISS32),
0002 0 IDENT = 'V04-000',
0003 0 ) =
0004 1 BEGIN
0005 1
0006 1 *****
0007 1 *
0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0025 1 *
0026 1 *
0027 1 *****
0028 1
0029 1 ++
0030 1
0031 1 FACILITY: RMS32 Index Sequential File Organization
0032 1
0033 1 ABSTRACT:
0034 1 Subroutines to probe large structures
0035 1
0036 1
0037 1 ENVIRONMENT:
0038 1
0039 1 VAX/VMS Operating System
0040 1
0041 1 --
0042 1
0043 1
0044 1 AUTHOR: Wendy Koenig CREATION DATE: 11-JUL-78 11:27
0045 1
0046 1
0047 1 MODIFIED BY:
0048 1
0049 1 V03-003 MCN0001 Maria del C. Nasr 15-Mar-1983
0050 1 Reorganize linkages
0051 1
0052 1 V03-002 KBT0227 Keith B. Thompson 23-Aug-1982
0053 1 Reorganize psects
0054 1
0055 1 V03-001 KPL0001 Peter Lieberwirth 22-Mar-1982
0056 1 Change probe length to 512 from 1024 since 1024 could hit
0057 1 first page of three, last page of three, and omit middle.
```



```

: 58      0058 1 |
: 59      0059 1 |          V02-004 REFORMAT      Maria del C. Nasr      24-Jul-1980
: 60      0060 1 |
: 61      0061 1 |
: 62      0062 1 |          *****
: 63      0063 1 |
: 64      0064 1 | LIBRARY 'RMSLIB:RMS';
: 65      0065 1 |
: 66      0066 1 | REQUIRE 'RMSSRC:RMSIDXDEF';
: 67      0131 1 |
: 68      0132 1 | | define default psects for code
: 69      0133 1 |
: 70      0134 1 | PSECT
: 71      0135 1 |     CODE = RMSRMS3(PSECT_ATTR),
: 72      0136 1 |     PLIT = RMSRMS3(PSECT_ATTR);
: 73      0137 1 |
: 74      0138 1 | | Linkages
: 75      0139 1 |
: 76      0140 1 | LINKAGE
: 77      0141 1 |     L_JSB;
: 78      0142 1 |
: 79      0143 1 |

```

```

81 0144 1 GLOBAL ROUTINE RMS$NOREAD_LONG (SIZE, ADDR, MODE) : RL$JSB =
82 0145 1
83 0146 1 ++
84 0147 1
85 0148 1 FUNCTIONAL DESCRIPTION:
86 0149 1
87 0150 1     subroutine to perform a long or short probe
88 0151 1
89 0152 1 CALLING SEQUENCE:
90 0153 1     bsbw rm$noread_long (size,addr,mode)
91 0154 1
92 0155 1 INPUT PARAMETERS:
93 0156 1     size of structure to be probed
94 0157 1     address of structure to be probed
95 0158 1     mode to do probing in
96 0159 1
97 0160 1 IMPLICIT INPUTS:
98 0161 1     none
99 0162 1
100 0163 1 OUTPUT PARAMETERS:
101 0164 1     none
102 0165 1
103 0166 1 IMPLICIT OUTPUTS:
104 0167 1     none
105 0168 1
106 0169 1 ROUTINE VALUE:
107 0170 1     0 if structure is readable
108 0171 1     1 if structure is NOT readable
109 0172 1     (values are such since action is taken if the structure
110 0173 1     is not readable and so the code looks cleaner)
111 0174 1
112 0175 1 SIDE EFFECTS:
113 0176 1     none
114 0177 1
115 0178 1 --
116 0179 1
117 0180 2 BEGIN
118 0181 2
119 0182 2 LOCAL
120 0183 2     LEN,
121 0184 2     START;
122 0185 2
123 0186 2 IF .SIZE<0, 16> LEQU 512
124 0187 2 THEN
125 0188 2     RETURN
126 0189 2
127 0190 2     IF PROBER(MODE, SIZE, .ADDR)
128 0191 2     THEN
129 0192 2         0
130 0193 2     ELSE
131 0194 2         1;
132 0195 2
133 0196 2     ! need to do long probe
134 0197 2
135 0198 2     START = .ADDR;
136 0199 2     LEN = .SIZE;
137 0200 2
```

```

: 138      0201      DO
: 139      0202      BEGIN
: 140      0203
: 141      0204      IF NOT PROBER(MODE, LEN, .START)
: 142      0205      THEN
: 143      0206          RETURN 1;
: 144      0207
: 145      0208          START = .START + 512;
: 146      0209          LEN = .LEN - 512;
: 147      0210      END
: 148      0211      UNTIL .LEN LSS 1;
: 149      0212
: 150      0213      RETURN 0
: 151      0214
: 152      0215      END;
```

```

.TITLE RM3PROBE
.IDENT \V04-000\
```

```

.PSECT RM$RMS3,NOWRT, GBL, PIC,2
```

0200	8F	04	AE	B1	00000	RM\$NOREAD LONG::		
						CMPL	SIZE, #512	: 0186
						BGTRU	1\$	
0B	BE	04	AE	0C	AE	0C	00008	: 0190
					0D	13	0000F	
					1B	11	00011	
		50		04	AE	7D	00013	: 0199
61		50		0C	AE	0C	00017	: 0204
					04	12	0001C	
		50		01	D0	0001E	3\$:	: 0206
					05	00021		
		51	0200	C1	9E	00022	4\$:	: 0208
		50	FE00	C0	9E	00027		: 0209
				E9	14	0002C		: 0211
				50	D4	0002E	5\$:	: 0213
					05	00030		: 0215
						RSB		

```

; Routine Size: 49 bytes, Routine Base: RM$RMS3 + 0000
```

```

; 153      0216 1
```



```
155 0217 1 GLOBAL ROUTINE RMSNOWRT_LONG (SIZE, ADDR, MODE) : RLSJSB =
156 0218 1
157 0219 1 ++
158 0220 1
159 0221 1 FUNCTIONAL DESCRIPTION:
160 0222 1
161 0223 1     subroutine to perform a long or short probe
162 0224 1
163 0225 1 CALLING SEQUENCE:
164 0226 1     bsbw rm$nowrite_long (size,addr,mode)
165 0227 1
166 0228 1 INPUT PARAMETERS:
167 0229 1     size of structure to be probed
168 0230 1     address of structure to be probed
169 0231 1     mode to do probing in
170 0232 1
171 0233 1 IMPLICIT INPUTS:
172 0234 1     none
173 0235 1
174 0236 1 OUTPUT PARAMETERS:
175 0237 1     none
176 0238 1
177 0239 1 IMPLICIT OUTPUTS:
178 0240 1     none
179 0241 1
180 0242 1 ROUTINE VALUE:
181 0243 1     0 if structure is writeable
182 0244 1     1 if structure is NOT writeable
183 0245 1     (values are such since action is taken if the structure
184 0246 1     is not writeable and so the code looks cleaner)
185 0247 1
186 0248 1 SIDE EFFECTS:
187 0249 1     none
188 0250 1
189 0251 1 --
190 0252 1
191 0253 2 BEGIN
192 0254 2
193 0255 2 LOCAL
194 0256 2     LEN,
195 0257 2     START;
196 0258 2
197 0259 2 IF .SIZE<0, 16> LEQU 512
198 0260 2 THEN
199 0261 2     RETURN
200 0262 2
201 0263 2     IF PROBEW(MODE, SIZE, .ADDR)
202 0264 2     THEN
203 0265 2         0
204 0266 2     ELSE
205 0267 2         1;
206 0268 2
207 0269 2 ! need to do long probe
208 0270 2
209 0271 2 LEN = .SIZE;
210 0272 2 START = .ADDR;
211 0273 2
```

```

: 212      0274 2 DO
: 213      0275 BEGIN
: 214      0276
: 215      0277 IF NOT PROBEW(MODE, LEN, .START)
: 216      0278 THEN
: 217      0279 RETURN 1;
: 218      0280
: 219      0281 START = .START + 512;
: 220      0282 LEN = .LEN - 512;
: 221      0283 END
: 222      0284 UNTIL .LEN LSS 1;
: 223      0285
: 224      0286 RETURN 0
: 225      0287
: 226      0288 END;

```

0200	8F	04	AE	B1	00000	RMSNOWRT	LONG::		
							CMPW	SIZE, #512	: 0259
							BGTRU	1\$	
08	BE	04	AE	0C	AE	0D	00008	PROBEW	MODE, SIZE, @ADDR
					0D	13	0000F	BEQL	3\$
					1B	11	00011	BRB	5\$
		50		04	AE	7D	00013	1\$:	MOVQ
	61	50		0C	AE	0D	00017	2\$:	PROBEW
					04	12	0001C	4\$:	BNEQ
		50			01	D0	0001E	3\$:	MOVL
						05	00021		RSB
		51	0200		C1	9E	00022	4\$:	MOVAB
		50	FE00		C0	9E	00027		MOVAB
					E9	14	0002C		BGTR
					50	D4	0002E	5\$:	CLRL
						05	00030		RSB
									R0
									: 0281
									: 0282
									: 0284
									: 0286
									: 0288

; Routine Size: 49 bytes, Routine Base: RMSRMS3 + 0031

```

: 227      0289 1
: 228      0290 1 END
: 229      0291 1
: 230      0292 0 ELUDOM

```

PSECT SUMMARY

Name	Bytes	Attributes
RMSRMS3	98	NOVEC,NOWRT, RD , EXE,NOSHR, GBL, REL, CON, PIC,ALIGN(2)

Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
_\$255\$DUA28:[RMS.OBJ]RMS.L32;1	3109	2	0	154	00:00.4

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS\$:RM3PROBE/OBJ=OBJ\$:RM3PROBE MSRC\$:RM3PROBE/UPDATE=(ENH\$:RM3PROBE)

; Size: 98 code + 0 data bytes
; Run Time: 00:03.4
; Elapsed Time: 00:13.1
; Lines/CPU Min: 5229
; Lexemes/CPU-Min: 6394
; Memory Used: 31 pages
; Compilation Complete

0327 AH-BT13A-SE
VAX/VMS V4.0

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RM3PROBE
LIS

RM3TDXSP
LIS

RM3PUTERR
LIS

RM3PUTUPD
LIS

RM3SPLUDR
LIS

RM3RRV
LIS

RM3ROOT
LIS

RM3PUT
LIS